

SANYO

Pharmaceutical Refrigerators







MPR-1013R MPR-1013 MPR-513R MPR-513

MPR-1013R





MPR-513

PHARMACEUTICAL REFRIGERATORS

The Ideal +4° Pharmaceutical Refrigeration in Capacities from 17.2 to 36.5 cu. ft.

SANYO's MPR Series Pharmaceutical Refrigerators offer a complete and integrated solution for the growing requirements for strict and exact storage temperatures for pharmaceuticals, medicines, and temperature sensitive biologicals. The slim design and optional sliding shelves allows for an ergonomic easy-reach retrieval of your product.

- Superior cooling performance
- Microprocessor temperature control
- Cycle defrost function
- Fan-forced air circulation
- Energy efficient
- Alarm and safety devices

innovation performance reliability support

preservation

STORAGE

Uniform storage is unaffected by ambient temperature.

An electronic sensor accurately monitors chamber temperature and feeds the information to the microprocessor for precise control at preset temperature. Fans ensure gentle air circulation to provide uniform top to bottom temperature control after frequent door openings. SANYO's easily calibrated, reliable and stable controls make validation easier.

COMPRESSOR

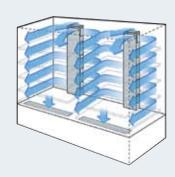
Remarkable cooling efficiency.

A highly efficient hermetic compressor, specially designed and developed by SANYO, is utilized to provide powerful and rapid cooling to maintain proper temperature level.

UNIFORMITY

Plenums Direct Airflow

SANYO's plenum design features uniform cold air flow distribution throughout the chamber to ensure temperature uniformity—essential for validated storage requirements.



DEFROST SYSTEM

SANYO's Cyle Defrost System

Defrosting is performed automatically during compressor "off" cycles, and by sensing frost levels. This way defrosting is performed only when required, further protecting the contents against unnecessary temperature rise. The defrosting heater also acts as an emergency heat source to prevent samples from freezing in extremely low ambient temperature conditions.

MPR-513Effective capacity: 17.2 cu. ft.



Cooling Performance: **2°C to 14°C** (Ambient temp. -5°C to 35°C)

MPR-1013R

Equipped with sliding shelves (right side) Effective capacity: 36.5 cu. ft. (1,034 liters)



Cooling Performance: **2°C to 14°C** (Ambient temp. -5°C to 35°C)







preservation

DESIGN

Ergonomic Design

The ergonomic design of the MPR series refrigerators provides a clear view of stored items through the large framed windows. The slim profile allows for easy reach retrieval of your products. Users can choose from two types to suit their needs.

SAFETY

• Cabinet Construction

View window design with protective film to prevent shattered glass from scattering on to the floor. Key locked doors.

• Control safety devices

Audible and flashing LED visual alarms alert you to the unlikely event of either a high or low temperature condition. An over-shooting prevention circuit automatically switches off the fan motor or heater, if the inside temperature rises abnormally.

• Remote alarm contacts

Low/high temperature audible and visual alarms and remote alarm contacts.



ENVIRONMENTAL FRIENDLY

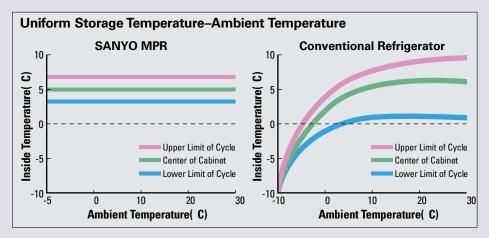
SANYO is CFC-Free

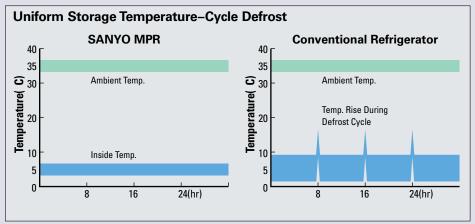
SANYO refrigerators feature commercially available CFC-free, HFC refrigerants and CFC-free insulation.

SANYO is RoHS Compliant

On July 1, 2006, the RoHS legislation (EU Directive 2002/95/EU) came into effect. RoHS is the restriction of hazardous substances to reduce the amount of pollution in the environment. Toxic substances in electrical equipment such as Lead, Cadmium, Mercury, Chromium 6+, PBB & PBDE, which can do serious harm to the environment, have been banned. The SANYO MPR series refrigerators are compliant with these regulations.









Specifications

Model No.	MPR-513, MPR-513R	MPR-1013, MPR-1013R
External dimensions (mm) W x D x H (inch)	900 x 600 x 1790 35.4 x 23.6 x 70.5	1800 x 600 x 1790 70.9 x 23.6 x 70.5
Interior dimensions (mm) W x D x H (inch)	800 x 465 x 1300 31.5 x 18.3 x 51.2	1700 x 465 x 1300 66.9 x 18.3 x 51.2
Effective capacity	489 liters (17.2 cu.ft.) MPR-513 486 liters (17.2 cu.ft.) MPR-513R	1037 liters (36.6 cu.ft.) MPR-1013 1034 liters (36.5 cu.ft.) MPR-1013R
Exterior cabinet	Baked-on acrylic finish galvanized steel	
Interior cabinet	Stainless steel	
Outer door	2 sliding doors Double layer glass window	
Cabinet insulation	CFC-free Rigid polyurethane foamed-in-place	
Outer door lock	•	1
Shelves & Sliding racks	5 polyesther coated wire shelves Load: 50kg per shelf (MPR-513)	10 polyesther coated wire shelves Load: 50kg per shelf (MPR-1013)
	5 polyesther coated wire shelves Load: 20kg per shelf 5 polyesther coated sliding racks Load: 20kg per rack (MPR-513R)	5 polyesther coated wire shelves Load: 50kg per shelf 10 polyesther coated sliding racks Load: 20kg per rack (MPR-1013R)
Cooling method	Forced cool air circulation	
Evaporator	Fin and tube	
Condenser	Wire tube, Tube on sheet	Fin and tube
Compressor	225W Hermetically sealed	300W Hermetically sealed
Refrigerant	R-134a	
Fan motor for cooling	For cooling: output 3W	For cooling: output 3W x 2
for condensing	_	For condenser: output 4W
Defrosting	Forced type, fully automatic	
Power Requirements	115V/60 Hz/1 phase NEMA 5-15P Plug	
Net weight	136kg (299lbs) MPR-513 142kg (312lbs) MPR-513R	240kg (528lbs) MPR-1013 252kg (554lbs) MPR-1013R

^{*}Appearance and specifications are subject to change without notice.

DIMENSIONAL DIAGRAMS (Unit: mm) 1800 900 — 800 (INSIDE) 1700 (INSIDE) 600 158 (DUCT) 158 (DUCT) 50-158 (DUCT) 150 300 122 465 415 1200__ 1300_ 1350_ 1202 1790 1790 466 440 Front elevation End section Front elevation

OPTIONTemperature Recorder MTR-C954 (Circular Type)





